

A. CLASSIFICATION OF SUBJECT MATTER  
 IPC 7 G10L11/02 G10L19/02 G10L21/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
 IPC 7 G10L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>WO 02/29780 A (CLARITY LLC ; ERTEM GAMZE (US)) 11 April 2002 (2002-04-11)</p> <p>abstract</p> <p>page 1, lines 6-12, 20-23</p> <p>page 2, lines 19-26</p> <p>page 3, lines 2-8</p> <p>page 4, lines 5-13</p> <p>page 6, line 25 - page 7, line 17</p> <p>page 20, line 6 - page 22, line 24</p> <p>figures 8-10, 14, 15</p> <p>-----</p> <p>-/-</p>	1-6

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

\* Special categories of cited documents :

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- \*E\* earlier document but published on or after the international filing date
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- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

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\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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\*&\* document member of the same patent family

Date of the actual completion of the international search

Date of mailing of the International search report

8 November 2004

24/11/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
 NL - 2280 HV Rijswijk  
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
 Fax: (+31-70) 340-3016

Authorized officer

Santos Luque, R

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	HYVARINEN A ET AL: "Independent component analysis: algorithms and applications" NEURAL NETWORKS, ELSEVIER SCIENCE PUBLISHERS, BARKING, GB, vol. 13, no. 4-5, June 2000 (2000-06), pages 411-430, XP004213197 ISSN: 0893-6080 cited in the application the whole document -----	1-6
A	GOTANDA ET AL.: "Permutation correction and speech extraction based on split spectrum through FastICA" IN PROCEEDINGS OF THE 4TH INTERNATIONAL SYMPOSIUM ON INDEPENDENT COMPONENT ANALYSIS AND BLIND SIGNAL SEPARATION, ICA 2003, 1 April 2003 (2003-04-01), pages 379-384, XP002304355 the whole document -----	1,3
A	SARUWATARI ET AL: "Speech enhancement and recognition in car environment using blind source separation and subband elimination processing" 4TH INTERNATIONAL SYMPOSIUM ON INDEPENDENT COMPONENT ANALYSIS AND BLIND SIGNAL SEPARATION, ICA2003, April 2003 (2003-04), pages 367-372, XP002304368 NARA, JAPAN pag. 370, left column, section 3.2 -----	1,3
A	MURATA N ET AL: "An approach to blind source separation based on temporal structure of speech signals" NEUROCOMPUTING ELSEVIER NETHERLANDS, vol. 41, 1998, pages 1-24, XP002304356 ISSN: 0925-2312 abstract pag 1-3, section 2 pag 8-9, section 3 -----	1,3
A	LIN C-T ET AL: "NOISY SPEECH SEGMENTATION/ENHANCEMENT WITH MULTIBAND ANALYSIS AND NEURAL FUZZY NETWORKS" INTERNATIONAL JOURNAL OF PATTERN RECOGNITION AND ARTIFICIAL INTELLIGENCE, WORLD SCIENTIFIC PUBLISHING COMPAGNY, SINGAPORE, SI, vol. 16, no. 7, November 2002 (2002-11), pages 927-955, XP001143964 ISSN: 0218-0014 abstract -----	1,3

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP2004/012899

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
WO 0229780	A 11-04-2002	AU 9498901 A	15-04-2002	WO 0229780 A2 11-04-2002